

CLAIMS

1. A method of forming a launderable fluid containment textile structure useful in absorbing fluid discharged by a user, wherein the textile structure is of stitch bonded construction having a machine direction and a cross-machine direction, the method comprising:

5 (a) providing a fluid retaining core layer of non-woven batting comprising a blend of hydrophobic textile fibers and hydrophilic textile fibers such that said hydrophobic textile fibers and hydrophilic textile fibers are dispersed substantially throughout said core layer;

10 (b) applying a plurality of bonding yarns in a repeating stitch bonding pattern through said core layer to form a preliminary stitch bonded composite having a technical face and a technical back and wherein segments of said bonding yarns define a user contact surface across the core layer; and

15 (c) mechanically shrinking the preliminary stitch bonded composite in at least the length dimension corresponding to the machine direction of the textile structure by introduction of mechanical compression, whereby the preliminary stitch bonded composite is shortened prior to use.

2. The method according to claim 1, wherein said bonding yarns are of a spun construction.

3. The method according to claim 2, wherein said bonding yarns comprise hydrophobic constituent fibers and hydrophilic constituent fibers.

4. The method according to claim 3, wherein at least a portion of said bonding yarns are open end spun yarns.

5. The method according to claim 3 , wherein said hydrophobic constituent fibers comprise polyester fibers and said hydrophilic constituent fibers comprise cotton fibers.

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6. The method according to claim 5, wherein said bonding yarns consist essentially of about 65% polyester and about 35% cotton.

7. The method according to claim 2, wherein said bonding yarns are characterized by a cotton count in the range of about 6 to about 36.

8. The method according to claim 2, wherein said bonding yarns are of a singles spun construction characterized by a cotton count in the range of about 6 to about 14.

9. The method according to claim 1, wherein said bonding yarns are textured polyester yarns.

10. The method according to claim 1, wherein in step "b" said bonding yarns are applied through said core layer at a stitch density in the machine direction of not greater than about 16 stitches per inch.

11. The method according to claim 1, wherein in step "b" said bonding yarns are applied through said core layer at a stitch density in the machine direction of not greater than about 12 stitches per inch.

12. The method according to claim 1, wherein in step "b" said bonding yarns are applied through said core layer at a stitch density in the machine direction of about 8 stitches per inch or less.

13. The method according to claim 1, wherein in step "b" said bonding yarns are applied through said core layer in a stitch bonding pattern such that said bonding yarns cooperatively define said user contact surface across the technical face of the preliminary stitch bonded composite.

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14. The method according to claim 1, wherein in step "c" the preliminary stitch bonded composite is shortened by not less than about 5 percent in the length dimension.

15. The method according to claim 1, wherein in step "c" the preliminary stitch bonded composite is shortened by about 15 percent or more in the length dimension.

16. The method according to claim 1, wherein said bonding yarns include a cotton constituent and wherein the method comprises the further step of selectively overdyeing the user contact surface to a shade other than white.

17. A method of forming a launderable fluid containment textile structure useful in absorbing fluid discharged by a user, wherein the textile structure is of stitch bonded construction having a machine direction and a cross-machine direction, the method comprising:

- 5 (a) providing a fluid retaining core layer of non-woven
batting comprising a blend of hydrophobic textile fibers and hydrophilic textile
fibers such that said hydrophobic textile fibers and hydrophilic textile fibers are
dispersed substantially throughout said core layer;
- 10 (b) applying a plurality of bonding yarns of spun construction
including both hydrophobic and hydrophilic constituent fibers in a repeating
stitch bonding pattern through said core layer at a stitch density in the machine
direction in the range of about 6 to about 10 stitches per inch to form a
preliminary stitch bonded composite having a technical face and a technical
back and wherein segments of said bonding yarns define a user contact surface
15 extending in contacting relation across the core layer such that there is no
intermediate layer between the core layer and the user contact surface; and
- 20 (c) mechanically shrinking the preliminary stitch bonded
composite in at least the length dimension corresponding to the machine
direction of the textile structure by introduction of mechanical compression,
such that the preliminary stitch bonded composite is shortened by about 15
percent or more prior to use without the introduction of undulations within the
textile structure and such that the thickness of the preliminary stitch bonded
composite is increased by more than about 30 percent whereby the overall
bulkiness of the preliminary stitch bonded composite is increased.

18. The method according to claim 17, wherein said bonding
yarns comprise polyester fibers in combination with substantially hydrophilic
fibers selected from the group consisting of cotton fibers and rayon fibers.

19. The method according to claim 18, wherein said bonding
yarns consist essentially of about 65 percent polyester and about 35 percent
cotton.

20. The method according to claim 18, wherein said bonding yarns are of a singles open end spun construction characterized by a cotton count of about 10.

21. The method according to claim 17, wherein in step "b" said bonding yarns are applied through said core layer in a stitch bonding pattern such that said bonding yarns cooperatively define said user contact surface across the technical face of the preliminary stitch bonded composite.

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22. The method according to claim 19, wherein said stitch bonding pattern is a chain stitch pattern.

23. An incontinence pad comprising a launderable fluid containment textile structure formed by the method as recited in claim 1.

24. An incontinence pad comprising a launderable fluid containment textile structure formed by the method as recited in claim 17.

25. A diaper comprising a launderable fluid containment textile structure formed by the method as recited in claim 1.

26. A diaper comprising a launderable fluid containment textile structure formed by the method as recited in claim 17.